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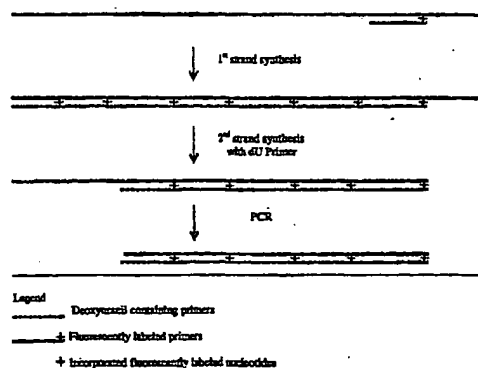
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- (71) Applicant: GENE LOGIC, INC. [US/US]; 708 Quince Orchard Road, Gaithersburg, MD 20878 (US). (88) Date of publication of the international search report:
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PARTIALLY DOUBLE-STRANDED NUCLEIC ACIDS, METHODS OF MAKING, AND USE THEREOF

PCR Incorporation of Deoxyuracil-containing Oligonucleotide Primer



(57) Abstract: A process is disclosed for generating at least one partially double-stranded target nucleic acid, which contains at least one single-stranded region at a terminal end. The process comprises the steps of (a) providing at least one primer, P1, containing at least one labile nucleotide; (b) combining at least one target nucleic acid sequence with P1 to generate a double-stranded polynucleotide containing at least one labile nucleotide; (c) exposing the double-stranded polynucleotide to conditions that promote single-strand cleavage of the polynucleotide at the site of the at least one labile nucleotide of primer P1; and (d) exposing the cleaved polynucleotide to conditions that promote the dissociation of the cleaved portions of primer P1 from a terminal end. The labile nucleotide may be dUTP, wherein the single-stranded cleavage of the polynucleotide at the site of the labile nucleotide occurs by treatment with uracil N-glycosylase.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/42845

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, BIOSIS, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 090 553 A (MATSON ROBERT S) 18 July 2000 (2000-07-18) see columns 3-5	1-50
X	WO 95 06753 A (US GOVERNMENT) 9 March 1995 (1995-03-09) see abstract, pages 6-7	1-50
X	WO 96 41005 A (THUNNISSEN FREDERIK B J M ;MURTAGH JAMES J (US)) 19 December 1996 (1996-12-19) see claims, figures 1-3, pages 6-8	1-50
X	WO 00 28084 A (MOLECULAR BIOLOGY RESOURCES) 18 May 2000 (2000-05-18) see p. 3-6, figure 1	1-50
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☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

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International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 334 515 A (BUCHMAN III GEORGE W ET	1-14
Y	AL) 2 August 1994 (1994-08-02) see columns 1-3, claims	15-50
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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